

## REMARKS

With this amendment claims 21-39 are pending in the application. Claims 40-44 have been cancelled. No new matter has been added.

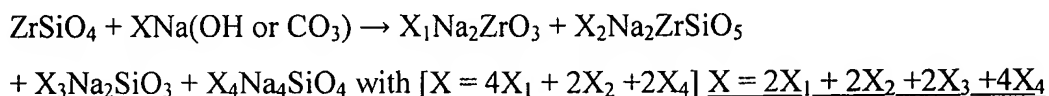
### New Declaration and Power of Attorney

In the Decision on Request under 37 C.F.R. 1.42 mailed September 5, 2002, the Office stated that a new Declaration was required before the patent issued so that the Declaration included the deceased inventor's last post office address and residence address. Enclosed herewith is a new Declaration that includes this information.

### Responses to Rejections

In the Office Action, the Examiner has objected to the amendment to the specification filed December 7, 2001 as adding new matter to the specification. . Applicants respectfully disagree with the Examiner's conclusion because the error in the specification is obvious, and one of skill in the art would readily understand that the correction does not add new matter.

The first portion of the Amendment appears on page 8 as follows:



This Amendment does not introduce new matter because it simply corrects an obvious error. X in the equation represents the stoichiometric amount of the reactant and products. The amendment to the equation for total X --  $[\text{X} = 4\text{X}_1 + 2\text{X}_2 + 2\text{X}_4] \quad \underline{\text{X} = 2\text{X}_1 + 2\text{X}_2 + 2\text{X}_3 + 4\text{X}_4}$  -- merely corrects the sodium mass balance for the reaction. The error in the specification would have been obvious because the formula for total X did not include  $\text{X}_3$ . Thus, one skilled in the art would not consider the amendment new matter.

Also, new matter is not added by the second Amendment to the specification, which appears on page 9 as follows: “Water leachable  $\text{SiO}_2$  values as percentages are then expected to be equal to  $[100X_1] \frac{100 (X_3 + X_4)}{100}$ .” The paragraph previous to this sentence explains that the  $\text{Na}_2\text{SiO}_3$  and  $\text{Na}_2\text{SiO}_4$  are soluble in water, and  $\text{Na}_2\text{ZrO}_3$  and  $\text{Na}_2\text{ZrSiO}_5$  are not soluble in water.  $X_3$  and  $X_4$  represent the stoichiometric amounts of the water soluble components, and not the insoluble components. Therefore one of skill in the art would readily understand that the 100% of the water leachable  $\text{SiO}_2$  is represented by the stoichiometric amounts represented by  $X_3$  and  $X_4$ , and not  $X_1$ . Accordingly, the error is obvious and the obvious correction is not new matter.

Accordingly, Applicants request that the objection to the specification be withdrawn.

Claim 21 stands objected to because it contained quotation marks and superfluous language. Claim 21 has been amended remove the quotation marks and superfluous language.

Claim 22 stands objected to as being of improper dependent form for failing to further limit the subject matter of claim 1. Applicants respectfully disagree. Claim 21 includes two alternative methods for “(b) treating the AFDZ to form a solid containing a hydrated zirconium product.” Those two alternatives are found in sections (i) and (ii) under step (b). Claim 22 limits the claim 21 to only the alternative of “(ii) reacting the AFDZ with a source of sulphate... .” Thus claim 22 limits the scope of claim 21 to one of two alternatives, which places claim 22 in proper dependent form. Accordingly, Applicants request that the rejection be withdrawn.

Claim 21 stands rejected as containing new matter because of the phrase “(i) leaching the AFDZ to provide ... the hydrated zirconium product.” Applicants respectfully direct the Examiner’s attention to claim 5 of the original specification (PCT/ZA00/00104), which includes

language that is nearly identical to that recited in claim 21. Accordingly, this phrase is not new matter, and the Applicants respectfully request that the rejection be withdrawn.

Claim 21 stands rejected as lacking the proper antecedent basis for “the solid hydrated zirconium product.” Applicants have amended claim 21 to provide the appropriate antecedent basis. Accordingly, Applicants request that the rejection be withdrawn.

Claims 27, 34, 37 and 39 have been amended to recite the full names for the acronyms AFDZ, AZST, and ZBS.

Claim 29 stands rejected as lacking the proper antecedent basis for “the leaching step.” Applicants have amended claim 29 to remove the word “step.” Therefore, “the leaching” has the appropriate antecedent basis in claim 27, part (b), which is directed to “leaching the AFDZ ... .” Accordingly, Applicants request that the rejection be withdrawn.

Claim 32 stands rejected as lacking the proper antecedent basis for “the mixture of the leached residue... .” Applicants have amended claim 31 to provide the appropriate antecedent basis for “the mixture” in claim 32. Accordingly, Applicants request that the rejection be withdrawn.

Claim 38 has been amended to change “1,5µm” to “1.5µm”.

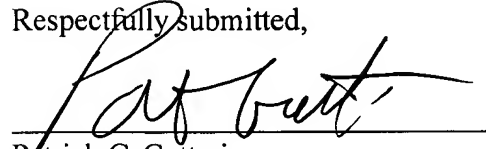
Claims 40-44 stand rejected under 35 U.S.C. § 103. Claims 40-44 have been cancelled, rendering the rejection moot.

## **CONCLUSION**

With the above Amendment and Remarks, Applicants submit that the application is not in a condition for allowance. If the Examiner is of the opinion that a telephone conference would

expedite prosecution of this application, Examiner is encouraged to contact Applicants' undersigned representative.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Patrick G. Gattari", is written over a horizontal line.

Patrick G. Gattari

Registration No. 39,682

Attorney for Applicant

McDONNELL BOEHNEN  
HULBERT & BERGHOFF LLP  
300 South Wacker Drive  
Chicago, Illinois 60606  
(312) 913-0001 telephone  
(312) 913-0002 fax